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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/773,744	02/06/2004	Kurt D. Sieber	83996RLO	8618

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EXAMINER	
DANG, TRUNG Q	

ART UNIT	PAPER NUMBER
2823	

DATE MAILED: 03/09/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/773,744	SIEBER ET AL.	
	Examiner	Art Unit	
	Trung Dang	2823	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☐ Responsive to communication(s) filed on _____.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-12* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-7,10 and 12* is/are rejected.

7)☒ Claim(s) *8,9 and 11* is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *06 February 2004* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date *02/06/04*.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claims 1-7, 10 and 12 are rejected under 35 U.S.C. 103(a) as being unpatentable over the admitted prior art in view of Seki (US 2003/0137242).

The admitted prior art depicted in Fig. 1 and described in page 6 of the pending specification teaches a method of making an OLED device in which patterned ITO electrodes have been formed on a substrate, which comprises the steps of:

cleaning the patterned ITO (indium-tin-oxide) electrodes and the substrate using liquid 10;

baking the cleaned ITO electrodes/substrate in an oven;

feeding the ITO electrodes/substrate into a vacuum processing station;

providing an oxidizing plasma in the vacuum processing station to modify the properties of the ITO electrodes;

providing a fluorocarbon plasma in the vacuum processing station to form a fluorocarbon layer over the modified ITO electrodes; and

further processing the structure to produce the electronic device.

The admitted prior art differs from the claims in that while the admitted prior art performs the baking (corresponding to the claimed heating) in a processing station and then transfers the ITO electrodes/substrate into another processing station for the oxidizing plasma and fluorocarbon plasma treatments, the claims call for a process in which all of the aforementioned processes are performed in the same processing station.

Seki teaches a method of forming an organic electroluminescence structure (i.e., including a plurality of OLED devices) in which patterned ITO electrodes are processed in a processing station depicted in Fig.6. That is, an ITO electrodes/substrate is subjected to a sequence of processes such as preheating treatment in chamber 51, oxygen plasma treatment in chamber 52, and fluorocarbon plasma treatment in chamber 53, all processes are performed in the apparatus of Fig.6 (see page 11). Note that the apparatus depicted in Fig.6 is considered a processing station as a whole.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the teaching of the admitted prior art by performing the baking step, the oxidizing plasma step, and the fluorocarbon plasma step in the processing station taught by Seki because using Seki's processing station, each process step can be carried out continuously within the apparatus without exposing the substrate to surrounding environment which would cause contamination on the

substrate. The use of the preheating treatment chamber 51 for the baking step would have been obvious to one skilled in the art because the preheating treatment chamber 51 provides heat, i.e., it functions as an oven.

For claim 2, the ITO electrode of the prior art would inherently have the electrical resistivity as claimed because the ITO electrode of the prior art and the electrode of the claim are subjected to identical treatments.

For claim 3, ITO is a transparent material.

For claims 4, 5, 7, see paragraph [0198] for the teaching that the plasma apparatus can be operated at atmospheric pressure.

For claim 12, the combined process would result in the OLED device as claimed. Notwithstanding the mentioned reasoning, applicants are reminded that a "product by process" claim is directed to the product per se, no matter how actually made. In re Hirao, 190 USPQ 15 at 17 (footnote 3). See also In re Brown, 173 USPQ 685; In re Luck, 177 USPQ 523; In re Fessmann, 180 USPQ 324; In re Marosi et al., 218 USPQ 289; In re Thorpe, 227 USPQ 964, all of which make it clear that it is the patentability of the final product per se which must be determined in a "product by process" claim, and not the patentability of the process, and that an old or obvious product produced by a new method is not patentable as a product, whether claimed in a "product by process" claims or not. Note that applicants has the burden of proof in such cases, as the above caselaw makes clear.

Allowable Subject Matter

2. Claims 8, 9 and 11 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

3. The following is a statement of reasons for the indication of allowable subject matter:

Claims 8, 9, and 11 are allowable over prior art of record because the prior art does not teach or suggest the claimed feature regarding the use of shaped and appropriately positioned plasma producing electrodes for the purpose recited in the claimed.

4. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Trung Dang whose telephone number is 571-272-1857. The examiner can normally be reached on Mon-Friday 9:30am-6:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Olik Chaudhuri can be reached on 571-272-1855. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on

access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Trung Dang
Primary Examiner
Art Unit 2823

03/06/05